

METHODS AND APPARATUS FOR DISCOVERING A POWERABILITY  
CONDITION OF A COMPUTER NETWORK

ABSTRACT OF THE DISCLOSURE

5           The invention is directed to techniques for discovering a powerability condition of a computer network such as the existence of a remotely powerable device attached to a connecting medium of the computer network. Such detection can then control whether a remote power source (e.g., a data communications device such as a switch) provides remote power (e.g., phantom power) to the computer network. One  
10   arrangement of the invention is directed to an apparatus for discovering a powerability condition of a computer network. The apparatus includes a signal generator, a detector and a controller which is coupled to the signal generator and the detector. The controller configures the signal generator to provide a test signal to a connecting medium of the computer network, and configures the detector to measure a response  
15   signal from the connecting medium of the computer network. The controller then indicates whether a remotely powerable device connects to the connecting medium of the computer network based on the response signal. Accordingly, if the apparatus discovers a remotely powerable device attached to the computer network (i.e., the power requirement condition of the network), the apparatus can provide power to the device  
20   remotely (e.g., through the connecting medium). However, if the apparatus does not discover a remotely powerable device attached to the computer network (e.g., another power requirement condition), the apparatus can avoid providing power remotely and thus avoid possibly damaging any non-remotely powerable device on the computer network.